PRELIMINARY EXAMINATION OF WOLF RIVER HARBOR, INDIANA.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING.

With letter of the Chief of Engineers, report of a preliminary examination of Wolf River Harbor, Indiana, on Lake Michigan.

JANUARY 11, 1893.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

> WAR DEPARTMENT, Washington, January 10, 1893.

SIR: I have the honor to inclose, herewith, a letter from the Chief of Engineers dated January 9, 1893, together with a copy of a report from Capt. W. L. Marshall, Corps of Engineers, dated December 29, 1892, of a preliminary examination made by him in compliance with the provisions of the river and harbor act of July 13, 1892, of Wolf River Harbor, Indiana, on Lake Michigan.

Very respectfully,

S. B. ELKINS, Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS, UNITED STATES ARMY,

Washington, D. C., January 9, 1893.

SIR: The river and harbor act approved July 13, 1892, requires a preliminary examination to be made of "Wolf River Harbor, Indiana, on Lake Michigan; and the engineer will report whether Wolf River and Lake are navigable water ways of the United States or whether covered in whole or in part by claims of private ownership."

This examination has been made by the local officer, Capt. W. L. Marshall, Corps of Engineers, and I have the honor to submit the

inclosed copy of his report thereon, dated December 29, 1892.

It appears that, properly speaking, there is no "harbor" of Wolf

River now existing. It is the opinion of Capt. Marshall that no public interests can be subserved by the construction of a harbor at the outlet of Wolf Lake, and that the locality is not at this time worthy of improvement by the General Government. This conclusion is con-

curred in by the Division Engineer and by this office.

In further compliance with the terms of the act, Capt. Marshall states that Wolf River and Lake are not navigable waters of the United States in the sense that they can be used to carry on commerce by water in any ordinary way between the States of the United States or with foreign countries; and that the area covered by Wolf Lake is embraced in whole or in part by claims of private ownership, the title to that part of the territory in question lying in the State of Illinois being a matter now before the courts for settlement.

Very respectfully, your obedient servant,

THOS. LINCOLN CASEY, Brig. Gen., Chief of Engineers.

Hon. S. B. ELKINS, Secretary of War.

PRELIMINARY EXAMINATION OF WOLF RIVER HARBOR, INDIANA, ON LAKE MICHIGAN.

United States Engineer Office, Chicago, Ill., December 29, 1892.

GENERAL: In compliance with the instructions of the Department, dated July 14, 1892, I have the honor to report upon a preliminary examination of "Wolf Lake Harbor, Indiana, on Lake Michigan; and the engineer will report whether Wolf River and Lake are navigable water ways of the United States, or whether covered in whole or in part by claims of private ownership," to comply with the requirements of the river and harbor act of July 13, 1892.

This lake is well known to this office and has been repeatedly exam-

ined and reported upon heretofore, as follows:

Maj. D. C. Houston, 1873; a report was submitted to the Chief of Engineers, dated November 26, a copy of which report has not been seen by me. (2) By Maj. George L. Gillespie, Corps of Engineers (see Report Chief of Engineers, 1875, p. 241). (3) By Maj. Garrett J. Lydecker, Corps of Engineers (see Report Chief of Engineers, 1881, p. 1999). (4) By Maj. W. H. H. Benyaurd, Corps of Engineers (Report Chief of Engineers, 1885, p. 2056). (5) By Capt. W. L. Marshall, Corps of Engineers, to the Chief of Engineers, not published, dated April 1, 1892.

Maj. Gillespie made a full and detailed report, and Majors Gillespie and Lydecker made estimates for a harbor on various plans, which are

shown in part on the map* herewith.

The conclusion reached in all these reports, at the dates of the re-

ports, were adverse to the construction of a harbor at this point.

The examination now made was by Assistant Engineer G. A. M. Liljenerantz, whose report thereon is appended hereto. There is also a map* showing the relation of the so-called Wolf Lake to Lake Michigan, and also to the Calumet River and to other so-called lakes in the vicinity; also a map* showing the outlet to Wolf Lake, as it existed at high water in Wolf Lake, 1892, together with the plans for harbors at this point on Lake Michigan, heretofore made.

Wolf Lake is one of a series of depressions in the low, marshy ground in the vicinity of the Calumet River; it is about 2 miles long and about $1\frac{1}{4}$ mile in width, with an average depth of about 2 feet, an extreme depth, as shown by the soundings lately made, of 4 feet 1 inch, and the larger part of its area covered with sedges. The boundary between the States of Indiana and Illinois nearly bisects the lake. It has no constant connection with Lake Michigan, but there is a gut or old outlet called Wolf River, extending from Wolf Lake to the sand bar at its mouth, 1 mile or less in length, and varying in depth from 6 to 14 feet. Its mouth at times is entirely closed; at other times, when Wolf Lake is higher than Lake Michigan, the sand bar is cut through by its efflux. At still other times it is closed artificially by a dam, and water is pumped from Lake Michigan into the so-called lake to make ice.

Neither the lake nor the river are navigable waters of the United States in the sense that they can be used to carry on commerce by water in any ordinary way between the States of the United States or with foreign countries. A small stretch of Wolf River is of sufficient depth to float boats of, say, 8 feet draft, but this river is blocked near its mouth by three fixed railroad bridges and shut off from Lake Michigan by a sand bar. At the other end is an unnavigable pond.

There is no such thing in existence as "Wolf River Harbor, Lake

Michigan."

The report of Mr. Liljencrantz gives a clear idea of the degree of development of this region. The demand for a harbor comes from owners of lands as yet undeveloped. There is but a sparse population, and no public interests to be subserved by the construction of a harbor at this

point.

A harbor at this point can be readily constructed, * * * but it will lead to no established industries of magnitude demanding transportation by water, nor to waters capable of floating craft navigating Lake Michigan. I know of no public interest that at this time can be subserved by a construction of a harbor at this point, but such a construction would materially improve the value of undeveloped lands in this vicinity and thus indirectly benefit the public.

The law also requires me to report as to this river and lake, "whether covered in whole or in part by claims of private ownership." I have to report that the area of Wolf Lake is covered in whole or in part by

claims of private ownership.

I have in this connection respectfully to refer to "United States Reports, volume 140." "Cases adjudged by the Supreme Court at October term, 1890, J. Bancroft Davis, reporter," case of Hardin vs. Jordan, p. 371, which is a case still in the courts. As stated in this report, this case is under "an action in ejectment brought by Gertrude Hardin, the plaintiff in error, to recover possession of certain lands lying on the south and west sides of a small lake in Cook County, Ill. [Wolf Lake] * * * and also to recover the land under water [italics mine, W. L. M.] * * * The court below decided that plaintiff's title only extended to low-water mark, and to that extent gave judgment for the plaintiff, but as to all the land under permanent water gave judgment for the defendant."

This case arose, with others still in the Illinois State courts, from two sets of patents granted by the United States, one in 1841, or about that date, and another set granted in 1881, or about that date. The original surveys were made in 1834-'35, but later the Land Office ordered a second survey, and as a result issued other patents covering the bed of this lake, and this and other contests follow.

Without going into detail into this case, which is published as stated, it may be stated as facts simply to comply with the requirements of the river and harbor act of July 13, 1892, that the Supreme Court practically decided that that part of Wolf Lake in dispute is unnavigable waters of the State of Illinois, and that following the decisions of the State courts of Illinois, as far as relates to the part of this lake within Illinois, that the holders of the original patents, 1841, own the bottom of Wolf Lake to the center of the stream in front of this riparian property, and that the second set of patents are invalid, and remanded the case to the United States circuit court for this circuit for a decree in accordance with this decision. The case came up as remanded, and Judge Gresham, in accordance with the mandate of the Supreme Court, made the decree as directed. The losing party demanded a second trial under the laws of the State of Illinois applicable in ejectment cases. The motion was overruled by Judge Gresham, and an appeal was taken to the Supreme Court of the United States from this ruling. The Supreme Court sustained the appeal, and the case is accordingly again before the United States circuit court here for a second trial. As already stated, there are other cases pending in Illinois State courts in which the area covered by Wolf Lake in whole or in part is covered by conflicting claims of ownership by private parties.

In conclusion, for the reasons shown, I am of the opinion that no public interests can be subserved by the construction of a harbor at the outlet of Wolf Lake, and that the locality is not at this time worthy of

improvement by the General Government.

I am, sir, very respectfully, your obdient servant, W. L. MARSHALL, Captain, Corps of Engineers.

Brig. Gen. THOMAS L. CASEY, Chief of Engineers, U.S. A.

(Through Col. O. M. Poe, Corps of Engineers, Division Engineer, Northwest Division.)

[First indorsement.]

U. S. ENGINEER OFFICE, Detroit, Mich., December 31, 1892.

Respectfully forwarded to the office of the Chief of Engineers. I concur in the conclusions reached by the district engineer. O. M. POE,

Colonel, Corps of Engineers, etc., Division Engineer, Northwest Division.

REPORT OF MR. G. A. M. LILJENCRANTZ, ASSISTANT ENGINEER.

UNITED STATES ENGINEER OFFICE, Chicago, Ill., December 22, 1892.

CAPTAIN: I have the honor to report that, in pursuance of your verbal orders, I have made an examination of Wolf Lake and River, Illinois and Indiana, the result of which is hereby respectfully submitted.

The act of Congress approved July 13, 1892, provides for the making of a "pre-liminary examination of Wolf River Harbor, Indiana."

There is, however, no harbor in existence at the outlet of Wolf River, Indiana. The existing natural facilities for a harbor at this place consist of:

(1) Wolf Lake, about 2½ miles in length and 1½ miles in width, divided in two nearly equal parts by the boundary line running north and south between the States

of Illinois and Indiana; and

(2) Wolf River, a mile in length, extending from the northerly limits of above-named lake to a point near the shore of Lake Michigan, on the Indiana side of the State line. There is at present no natural connection between this river and Lake Michigan.

Several examinations and surveys have been made by the United States Govern-

ment of this locality.

Maj. D. C. Houston, Corps of Engineers, U. S. Army, made an examination of Wolf Lake and River in 1873, and submitted a report to the Chief of Engineers, dated

November 26 of that year.

In 1874 a careful survey was made under direction of Lieut. Col. G. L. Gillespie, Corps of Engineers, U. S. Army. Soundings were then taken in the river, as well as in Lake Michigan, opposite the northern terminus of the river, and in lakes Wolf and George. The report on this survey is found in Chief Engineer's Report for 1875, page 241. Two maps were submitted with this report; one, to a scale of 1 inch = 1,000 feet, showing Wolf and adjoining lakes and their relative positions to Calumet River; the other, to a scale of 1 inch = 1,000 feet, showing Wolf River and a portion of Lake Michigan.

Maj. G. J. Lydecker, Corps of Engineers, U. S. Army, submitted a report to the Chief of Engineers on an examination made under his direction in 1879, which report was

accompanied by maps and plans for a harbor at this place.

This report will be found on page 1999 of Chief Engineer's Report for 1880.

Wolf Lake and River remain practically the same as they were found on the occasions cited above, save the result of some dredging done by the Knickerbocker Ice Company along the westerly side of the river in the vicinity of Wolf Lake, where

large ice houses have been built by said company.

At the northerly end of the river an artificial connection has been made with Lake Michigan, through a channel of from 10 to 12 feet in width, provided with a water wheel run by steam power, at the lake shore, by means of which pure lake water is forced into the river at the rate of approximately 100,000 cubic feet per hour, for the benefit of the ice houses along the river bank.

A pile pier, 496 feet in length, and filled with brush and stone, extends out into

Lake Michigan from the point where the water wheel is located.

A detail sketch submitted herewith shows the work just referred to and also a strip of land 300 feet wide, between the Baltimore and Ohio Railroad tracks and the lake shore, which was deeded to the United States Government in May, 1889, for the purposes of a public harbor.

Wolf Lake was several years ago connected, by dredged narrow channels, with Lake George and, via Hyde Lake, with Calumet River. These channels have, however, lately been closed up with earth dams, to retain the water pumped into Wolf

Lake, as above described.

No manufacturing enterprises have as yet been established in the vicinity of this lake or river, but there has otherwise been considerable activity displayed in the

improvements of various kinds made to the adjacent territory.

Two large ice houses have been built by the Knickerbocker Ice Company, in addition to the old one near Indiana Boulevard, which was in existence already in 1874. Quite a number of smaller houses have been erected, mostly used for dwellings; others, somewhat larger, intended for boarding houses, which are in demand at the times of ice harvests.

In addition to these buildings there are others of various sizes and used for differ-

ent purposes, such as stores, post-office, stables, saloons, etc.

One of the most extensive enterprises of the place, and of importance when considering its influence on the value of real estate in the immediate vicinity, is the Roby race track, inclosing an area of 16 blocks, between the State line and Fourth avenue and between One hundred and eighth and One hundred and telfth streets. It may be mentioned here that the land along the westerly borders of the river has been subdivided and many of the streets laid out on the ground, some of which have been graded and ditched.

The Baltimore and Ohio Railroad Company is in process of constructing a quite extensive switch yard to the westward of and near to where their main tracks cross Wolf River, with the intention, as I have been informed, of erecting a roundhouse

at this place.

The Chicago, Pittsburg and Fort Wayne, and the Lake Shore and Michigan Southern railroads have depots near by, known under the common name of Roby Station.

A private branch track runs from the main line of the former of these two roads

A private branch track runs from the main line of the former of these two roads southward along the westerly side of Wolf River, passing along each of the ice houses and extending to the water's edge at the north shore of Wolf Lake.

Farther west run two other branch lines, in a southerly direction, from the same

main line, the first of which runs between Wolf and Hyde lakes, under the name of South Chicago and Southern Railroad; the second, under the name of the Calumet River Railroad, runs west of the last named lake. At a point about south of Wolf Lake the two branch lines join together and serve to connect South Chicago with Hegewisch, Hammond, and East Chicago.

The locations of these railroads are shown on a map compiled from various maps and available data, as well as from notes and observations collected on the ground. The map also shows soundings taken in Wolf Lake, December 21, 1892. Though these soundings are but few, compared to the size of the lake, they will give a quite clear idea of the general character of this lake, which is quite shallow and has a bottom with but slight irregularities.

I am, captain, very respectfully, your obedient servant,

G. A. M. LILJENCRANTZ, Assistant Engineer.

Capt. W. L. MARSHALL, Corps of Engineers, U. S. A